

ASSOCIATED ASPHALT ROANOKE, Inc.

Roanoke, Virginia

2003 E2 Status Annual Report

January 2004

Business Operation Overview

Associated Asphalt is considered a liquid asphalt reseller. In other terms, we are a wholesaler of liquid asphalt to the road construction industry. Liquid asphalt, also known as a “binder”, is the component of the road mixes that when combined with stone or aggregate keeps the final product together. Today’s roads are a mix of liquid asphalt, stone and any additives that increase the elasticity and durability of the final product which is the highways and roads we use each and every day.

As far as our business process, it is quite simple. We receive the liquid by rail car. When the rail cars arrive, the product inside is not hot enough to transfer. We hook steam lines up to the rail cars and allow the cars to heat for roughly 10-15 hours allowing the internal coils of the cars to raise the internal temperature of the liquid. Once the liquid reaches the desired temperature, we then transfer the product from the rail cars to the storage tanks. The storage tanks are constructed with internal heating coils which circulate heat transfer oil through them giving us the ability to maintain the liquid asphalt at a desired temperature.

When then transfer the liquid from the storage tank to a tanker trailer which delivers the product to the contractor. The liquid asphalt as it arrives by rail car is never altered to produce another product. We do not manufacture or process anything. We do not produce any hazardous waste as a result of the product transfer and heating.

The following highlights the improvements we implemented for 2003.

Energy Management

Steam Boiler Fuel

We looked to improve upon the savings we incurred with our steam boiler fuel consumption from 2002 over 2001. In 2002, we shut down the boiler during the time allotted for transferring product from the rail cars to the storage tanks using the assumption that once the rail cars reach desired temperature, the cars would maintain that temperature during the time necessary to completely transfer all liquid from the rail cars. This assumption held true. Because of this change we reduced our boiler fuel consumption by 20% in 2002. This savings is compounded by the fact that we also sold more liquid asphalt for 2002 as compared to 2001. We looked to improve on these savings by reducing the header pressure on the boiler thus reducing the maximum system pressure required to reach and maintain the desired heating temperature. Initially we started seeing savings but at the expense of an increase of heating time and transfer time of the liquid from the rail cars to the storage tanks. This was not a pressing issue at the beginning of our season, but as we hit peak season, we started suffering delays in releasing railcars back to the suppliers and delays in getting product to our customer. We had to abort the initial reduction in header pressure settings and revert back to the previous settings. For 2003, we plan on experimenting with adjusting the setting

according to scheduled inventory movements through additions and reductions in product levels.

Electrical Consumption

For 2002 we implemented the following energy conservation techniques for all of the company workstations. We activated a standby option on the monitors after ten minutes of inactivity. We activated options which would power down the monitors and hard drives after one hour of inactivity. We also activated a shut down function that would turn off the system after four hours of inactivity.

We have started replacing used fluorescent bulbs with the energy conserving “green tip” bulbs. In conjunction with this change, we have begun collecting used bulbs for recycling instead of disposing in the general solid waste stream.

Due to extreme differences in weather, as reflected in the degree days of 2002 vs 2001, we were not successful in charting energy consumption reductions. 2002 was a unique year for weather but we are confident that the changes implemented provided for a reduction in energy consumption.

In 2003, we also completed the exchange of all standard office thermostats for programmable thermostats.

Waste Management

Recycling

Beginning in August of 2002, we began recycling paper, cardboard and metal. For calendar year 2003, we were able to recycle 2,520 pounds of assorted paper products. The year 2003 was the first complete year of recycling and we expect to increase the capture rate of paper products through further training and recognition.

Truck Operations

Idling

In 2003, we began targeting diesel truck idling as an area in which the potential for improvement was present. We dedicated regular training time to idling and techniques used to reduce idling time. We researched methods to determine functional and excess idling time. Unfortunately we were not able to establish a cost effect means to track both.

Most recently, we have discovered a potentially accurate and affordable method of tracking idling. We are currently working with the supplier of this technology to determine the feasibility of this system.

We are anticipating that if the idling tracking program is implemented, it functionality can be expanded to accommodate preventative maintenance and diagnostic analysis for

the commercial tractors. This would be beneficial by allowing us to detect problems in the early stages thus reducing or eliminating the operation of an inefficient engine.

Odor Management

While odor nuisance has not been a concern for our facility, we have still taken a proactive approach to the management of this element of our business. In 2003, we began the installation of a carbon filtration system that will capture odor emanating from our storage tanks and loading racks. To date, we have completed the installation of the duct system on three of our tanks and four loading racks. We have acquired all of the equipment necessary to complete the capture system. It has all been installed and positioned. At this time, we are working on connecting all elements of the system and plan on concluding the installation of this system by the spring of 2004. The remaining four tanks and one loading rack that have not been tied into the system will be completed by the spring of 2005.

Future Goals and Strategies

Environmental Management System (EMS)

We are in the final stages of the development and implementation of our EMS. We have taken a unique step in attempting to house our entire EMS program on a web-based site. We have contracted with a system vendor to develop a site that will house our entire EMS. It will be accessible by not only our Roanoke location but also our two North Carolina locations and our South Carolina location as well.

This web-based system will greatly reduce the consumption of paper products associated with the extensive documentation requirements of an EMS. It will allow for quicker response time to corrective measures needed to maintain compliance. It will allow for greater communication between locations providing greater efficiencies and progress. One function of the web-based system will be to allow open access to certain sections of the program allowing regulatory agencies, auditors and the general public to observe our program in action.

We believe positioning the EMS in this way will provide us with increased opportunity to be successful in all aspects of our environmental endeavors as we strive for continuous compliance and environmental excellence.

Steam Boiler

As referenced earlier, we plan on analyzing the adjustment of our boiler steam header pressure to see if we can greater manage this operation in the hopes of reducing our fuel consumption.

Asphalt Storage Tanks

We are currently tracking storage tank temperatures with the intention of managing these temperatures in a certain range for two reasons. The proper temperature management will reduce the demand on the tank heating system causing a decrease in electrical and fuel consumption. Secondly, it has been determined that as the tank temperature increases the chance of greater emissions increases. By managing the upper limits of the temperature range, we are able to maintain lower levels of emissions from these tanks.

General Systems Management

We are currently exploring the feasibility of an operations management system that would allow us to track tank temperatures, asphalt and heat transfer oil pumps and tank inventory levels. This function would be performed by a wireless system that would communicate with our web-based EMS program. The benefits to our operations would be the following:

- Real time tank temperature readings
- Early detection of increased loads on pumps providing for the reduction and/or elimination of product transfer down time
- Real time inventory readings allowing for more efficient product transfer